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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,998	01/11/2002	Vitaliy S. Fain	3229.1000-000	8102

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AKC PATENTS
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NEWTON, MA 02466

EXAMINER
SHORTLEDGE, THOMAS E

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**
Office Action Summary	10/043,998	FAIN ET AL.
	Examiner	**Art Unit**	
	Thomas E. Shortledge	2626	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2006*.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5, 9-13 and 17-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5, 9-13 and 17-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to Remarks/Arguments, filed 09/29/2006.

2. Claims 1-5, 9-13 and 17-19 are pending. Claims 1-2, 9-10, and 17-19 have been amended.

3. The objection to claim 1 has been withdrawn in accordance with the applicants' amendments.

Response to Arguments

4. Applicant's arguments with respect to claims 1-5, 9-13 and 17-19 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 18-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 18 recites "A machine readable medium...", where the machine readable medium, as described by the Specification (page 18, lines 15-20), includes a communications or transmission medium such as a

bus or a communication link, either optical, wired or wireless, carrying program code

segments as digital or analog data signals. Further, Claim 19 recites "a computer data

signal embodied in a carrier wave...". The computer readable medium must be physical

structure, which provides the functional descriptive material in usable form to permit the

functionality to be realized with the computer. A program product which does not

explicitly include such a medium, a program per se, a signal or other type of

transmission media that fails to include the hardware necessary to realize the

functionality (e.g., a transmitter or a receiver), and a piece of paper with the functional

descriptive material written on it are all examples of media which are not believed to

enable the functionality to be realized with the computer.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7.   Claims 1-4, 9-12 and 17-19 are rejected under 35 U.S.C. 102(e) as being

anticipated by Junqua (US 6,598,018 B1).

As to claim 1, Junqua teaches:

receiving a symbolic representation of a free continuous speech natural language utterance;. parsing said symbolic representation of said free continuous speech natural language utterance into parsed information (a natural language interface where the input natural language is processed by a speech recognizer and supplied to a natural language parser, col. 1, lines 55-65 and col. 2, lines 12-18);

entering said parsed information into a computer instruction generator, wherein said computer instruction generator is adapted to receive inputs from a context sensitive subject area dictionary system, a context sensitive program module subdictionary system, a context sensitive argument subdictionary system and a context value subdictionary system and wherein said context sensitive subject area dictionary system comprises data organized in a plurality of subject areas, said context sensitive program module subdictionary system comprises data organized in a plurality of program modules for each of said subject areas, said context sensitive argument subdictionary system comprise data organized in a plurality of arguments for each of said program modules and said context sensitive value subdictionary system comprises data organized in a plurality of values for reach of said arguments (entering parsed data to create computer instructions, where the computer instructions are based on the subject area (what to control, the audio or directions), what device (navigation system, radio, cd player, GPS, tape deck, or compact disk player), what command to carry out (get directions, change cd's, change volume), and how to carry out the command (directions

to a point, cd to change to, what volume to change to), where each of the devices has

its own context module set to control that device, having specific rules for specific

functions of that device, col. 2, lines 24-43 and col. 5, lines 3-35);

determining, by accessing said context sensitive subject area dictionary system ,

a subject identifier, for a subject area of said parsed information (accessing the context

of each of the systems to determine the subject area of the parsed information to be

carried out, col. 2, lines 24-43);

determining, by accessing said context sensitive program module subdictionary

system a module identifier for a program module of said subject area based upon the

determined subject area identifier and the parsed information (based on the subject

found and the parsed information, determining which system to command, col. 2, lines

24-43);

determining by accessing said context sensitive argument subdictionary system,

an argument identifier for an argument of said program module based upon the

determined identifier and the parsed information (determining what action to carry out

based on the context module of the selected system, col. 2, lines 24-43);

determining, by accessing said context sensitive value subdictionary system, a

value identifier for a value of said argument based upon the determined argument

identifier and the parsed information (determining how to carry out the action, to what

extent, col. 2, lines 24-43); and

producing computer instructions based upon the subject area identifier such that

the free continuous speech natural language utterance is processed by the computer

(creating computer instructions once the natural language input is received, col. 2, lines 1-22).

As to claims 9, 17, 18 and 19, Junqua teaches:

a computer readable medium comprising a set of program instructions (a natural language interface within an automobile system, where it would be inherent that the automobile system would contain a computer with instructions, since it used to control a navigation and audio system and it also inherently have a memory since it contains the ability to be updated, col. 1, lines 5-10 and col. 2, lines 55-60 and 35-43).

a receiver receiving a symbolic representation of a free continuous speech natural language utterance; a parser parsing said symbolic representation of said free continuous speech natural language utterance into parsed information (a natural language interface where the input natural language is processed by a speech recognizer and supplied to a natural language parser, col. 1, lines 55-65 and col. 2, lines 12-18);

a context sensitive subject area system dictionary system comprising data organized in a plurality of subject areas, wherein said context sensitive a subject area dictionary system is used to determine a subject area identifier for a subject area of said pares information (determining from the context module the subject of the command to be carried out, be it audio or navigational, col. 2, lines 24-43);

a context sensitive program module subdictionary system comprising data organized in a plurality of program modules for each of said subject areas and wherein

said context sensitive program module subdictionary system is used to determine a

module identifier for a program module of said subject area based upon the determined

subject area identifier and the parsed information (determining from the subject and the

parsed information what system to carry out the command on, col. 2, lines 24-43);

a context sensitive argument subdictionary system comprising data organized in

a plurality of arguments for each of said program modules and where said context

sensitive argument subdictionary system is used to determine an argument identifier for

an argument of said program module based upon the determined module identifier and

the parsed information (arguments are stored specific to each of the system that carry

out those arguments, and based on the selected system and the parsed information a

selected argument is carried out, col. 2, lines 24-43);

a context sensitive value subdictionary system comprising data organized in a

plurality of values for each of said arguments and wherein said context sensitive

argument subdictionary system is used to determine a value identifier for a value of said

argument based upon the determined argument identifier and the parsed information

(data organized specific the system within the context module for that system, including

how to command that system where, to what extent to change the system (volume or

where to get directions to) is based on the context module and the parsed information,

col. 2, lines 23-44); and

computer instructions produced based upon the subject area identifier such that

the free continuous speech natural language utterance is processed by the computer

(creating computer instructions once the natural language input is received, col. 2, lines

1-22).

As to claims 2 and 10, Junqua teaches said subject area comprise a plurality of

sub-subject areas and the context sensitive system subject area dictionary system

further comprise a context sensitive sub-subject area subdictionary for each of said sub-

subjects areas (the context modules have a plurality of sub-subject areas including an

audio subject, and the sub-subjects being cd player, cassette player or the radio, col. 2,

lines 24-43).

As to claims 3 and 11, Junqua teaches a value identifier further comprises

querying the computer system for a missing value identifier (Fig. 3b element 106).

As to claims 4 and 12, Junqua teaches: wherein determining a subject area

identifier further comprises querying a user of the computer system for a missing

subject area identifier; determining a module identifier further comprises querying a user

of the computer system for a missing module identifier; and determining a value

identifier further comprises querying a user of the computer system for a missing value

identifier (if there are any missing slots that are not filled, the user is queried to supply

this information, Fig. 3b, elements 94, 101, 102, 104, 106 and 108).

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Junqua as applied to claims 1 and 9 above, and further in view of Polcyn (6,246,989).

       As to claims 5 and 13, Junqua does not teach wherein, determining a subject

area identifier further comprises using a previously determined value for a missing

subject area identifier, determining a module identifier further comprises using a

previously determined value for a missing module identifier, nor determining a value

identifier further comprises using a previously determined value for a missing value

identifier.

       However, Polcyn teaches receiving a natural language command from a user,

and understanding the command to carry out a particular action, by determining a

subject, action to be taken and argument values. Furthermore, Polcyn teaches a

system that is able to determine from previous values, command information that is not

understood or is missing from the current natural language input (col. 7, lines 30-40).

       Therefore, it would have been obvious to one of ordinary skill in the art at the

time of the invention to combine the methods of Junqua with the teachings of Polcyn to

allow a system to be updatable to contain new reference command information, as taught by Polcyn (col. 7, lines 38-40).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas E. Shortledge whose telephone number is (571)272-7612. The examiner can normally be reached on M-F 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TS
12/6/06

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER